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PTO/SB/01 (10-00)  
Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)</b>  <input checked="" type="checkbox"/> Declaration Submitted with Initial Filing      OR <input type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	Attorney Docket Number	SOLINAS-4
	First Named Inventor	DR. JEROME A. SOLINAS
	<b>COMPLETE IF KNOWN</b>	
	Application Number	/
	Filing Date	08-09-2001
	Group Art Unit	
	Examiner Name	

As a below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**CRYPTOGRAPHIC IDENTIFICATION AND DIGITAL SIGNATURE  
METHOD USING EFFICIENT ELLIPTIC CURVE**

*(Title of the Invention)*

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	
60/226,209	08/18/2000	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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## DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☐ Customer Number  OR ☒ Correspondence address below

Name **ATTN: PATENT COUNSEL, OGC**

Address **NATIONAL SECURITY AGENCY**

Address **9800 SAVAGE ROAD STE 6542**

City **FT MEADE** State **MD** ZIP **20755-6542**

Country **USA** Telephone **301-688-0287** Fax **301-688-0076**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any]) **JEROME ANTHONY** Family Name or Surname **SOLINAS**

Inventor's Signature *Jerome A Solinas* Date **8/8/01**

Residence: City **WESTMINSTER** State **MD** Country **USA** Citizenship **USA**

Mailing Address **3105 CARDINAL DRIVE**

Mailing Address

City **WESTMINSTER** State **MD** ZIP **21157** Country **USA**

NAME OF SECOND INVENTOR: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any]) Family Name or Surname

Inventor's Signature Date

Residence: City State Country Citizenship

Mailing Address

Mailing Address

City State ZIP Country

☐ Additional inventors are being named on the \_\_\_\_ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

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PTO/SB/81 (02-01)

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## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	
Filing Date	08-09-2001
First Named Inventor	DR. JEROME A. SOLINAS
Title	CRYPTOGRAPHIC IDENTIFICATION...
Group Art Unit	
Examiner Name	
Attorney Docket Number	SOLINAS-4

I hereby appoint:

☐ Practitioners at Customer Number  →

Place Customer  
Number Bar Code  
Label here

OR

☒ Practitioner(s) named below:

Name	Registration Number
ROBERT D. MORELL	37,398
STEPHEN M. BLOOR	39,612

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

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State

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Country

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Fax

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

### SIGNATURE of Applicant or Assignee of Record

Name	ROBERT D. MORELL
Signature	<i>Robert D. Morell</i>
Date	08-09-2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ Total of ONE forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: DR. JEROME A. SOLINAS

Application No./Patent No.: \_\_\_\_\_ Filed/Issue Date: 08-09-2001

Entitled: CRYPTOGRAPHIC IDENTIFICATION AND DIGITAL SIGNATURE METHOD USING  
EFFICIENT ELLIPTIC CURVE

THE NATIONAL SECURITY AGENCY a U.S. GOVERNMENT AGENCY  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

**NOTE:** A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

08-09-2001  
Date

Robert D. Morelli  
Signature

ROBERT D. MORELLI  
Typed or printed name

PATENT COUNSEL  
Title

---

**ASSIGNMENT**

(Government Employee)

---

**TITLE:**

**CRYPTOGRAPHIC IDENTIFICATION AND DIGITAL SIGNATURE METHOD USING  
EFFICIENT ELLIPTIC CURVE**

---

**INVENTOR:**

**DR. JEROME A. SOLINAS**

---

I, the undersigned inventor, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-identified invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Director, National Security Agency, the entire right, title, and interest throughout the world in and to the above-identified invention and application for patent and all Letters Patent issuing thereon, and any continuation, continuation-in-part or division of said application and any reissue or extension of said Letters Patent.

2. Agree to provide any further information within my knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution and settlement of the interferences and recording of title to patent applications and patents.

INVENTOR: DR. JEROME A. SOLINAS

ADDRESS: (City) WESTMINSTER (County) CARROLL  
(State) MD

DATE: 8/8/01

SIGNATURE: *Jerome A. Solinas*

State of MARYLAND )  
County of ANNE ARUNDEL )

On 8 August 2001 (date), known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that he or she executed the same as their own free act and deed.

*M. Ethelyn Wightman*  
(Signature)

(SEAL)

Notary Public of \_\_\_\_\_

My Commission Expires on \_\_\_\_\_  
M. ETHELYN WIGHTMAN  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires July 29, 2002